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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/090,709

03/04/2002

Satish N. Menon

A-69967/RMA

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7590

10/27/2006

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EXAMINER

LIN, KELVIN Y

ART UNIT

PAPER NUMBER

2142

DATE MAILED: 10/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/090,709

Applicant(s)

MENON ET AL.

Examiner

Kelvin Lin

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 15-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13, and 15-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## **Detailed Action**

### ***Response to Arguments***

1. Applicant's arguments, see Remarks from page 6 to 8, filed on Sept. 14, 2006, with respect to the rejection(s) of claim(s) 1-13, and 15-22 under 35 USC 102(e) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Lee J. (USPN 7107606).

### **Response to Amended Claims**

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-13, and 15-22 are rejected under 35 USC 103(a) as being unpatentable over Ben-Shau et al., (US PG Pub. No. 2002/0010798) in view of Lee J. (USPN 7107606).
2. Regarding claim 1, Ben-Shau teaches a metadata enabled edge server for distributing a content object to a user over a network communication link in

response to a user request (Ben-Shau, [0187]), said metadata enabled edge server comprising:

- a server computer having a processor and memory coupled to said processor for executing computer program instructions, and at least one input/output port for receiving and sending communications from external entities (Ben-Shau, [0072]);

Ben-Shau discloses the edge server computer hardware, but does not specifically disclose the local storage device.

- However, Lee discloses a local storage device coupled to said server computer and locally storing metadata describing content objects accessible to said server computer including at least one location from where a particular one of said content objects is stored and may be directed to said user (Lee, fig. 5, element 130, col.13, l.45-51);

Because knowing that Lee's structure of video on demand provides prescheduled multicast of video as well as dynamically transmission of the front port or videos via internet network, it would have been obvious to use the prescheduled multicast scheme of Lee in the device of Ben-Shaul to improve the user interface. Therefore, the claimed invention would have been obvious to one of ordinary skill in the art at the time of the invention.

- a local controller for distributing said particular one of said content objects to said user using said metadata and for maintaining isochronous delivery of portions of said particular one of said content objects over said network communication link (Lee, fig.4c, and fig.5, element 130, col.5, l.55-60, col.7, l.50-53, the admission controller designates for schedule the group to share a dynamically initiated multicast for user schedule (metadata), and transmits the video, contents object, over the network communication link.) .
3. Regarding claim 2, Ben-Shaui further discloses a metadata enabled edge server as in claim 1, wherein said controller includes a request response and a playback procedure executing as software on said metadata enabled edge server (Ben-Shaui, [0057], ).
  4. Regarding claim 3, Ben-Shaui further discloses a metadata enabled edge server as in claim 1, wherein said network communication link comprises the Internet (Ben-Shaui, [0003]).
  5. Regarding claim 4, Ben-Shaui further discloses a metadata enabled edge server as in claim 1, wherein said network communication link comprises a packet switched communication link not in itself having means for maintaining isochronous delivery of a content object separated into a plurality of packets for communication from said server to said requesting user (Ben-Shaui, [0049], [0283]).
  6. Regarding claim 5, Ben-Shaui further discloses a metadata enabled edge server

- as in claim 1, wherein said content objects are internally accessible to said server computer (Ben-Shaui, [0056]).
7. Regarding claim 6, Ben-Shaui further discloses a metadata enabled edge server as in claim 1, wherein said content objects are externally accessible to said server computer (Ben-Shaui,[0055] ).
  8. Regarding claim 7, Ben-Shaui further partially discloses a metadata enabled edge Server as in claim 1, wherein said storage device stores data selected from the group consisting of content physical properties, content storage locations, content usage terms content usage rights, content playback duration, content prefix cache status content network routing cost information, and combinations thereof. ( Ben-Shaui, [0049], [0083]).
  9. Regarding claim 8, Ben-Shaui further discloses a metadata enabled edge server as in claim 1, wherein metadata also includes a prefix portion of the content or a low-resolution preview of the content (Ben-Shaui, [0344]).
  10. Regarding claim 9, Ben-Shaui further discloses a metadata enabled edge server as in claim 1, wherein said control means includes a request response and playback procedure (Ben-Shaui, [0049], [0056]-[0057] ).
  11. Regarding claim 10, Ben-Shaui further discloses a metadata enabled edge server as in claim 1, wherein said storage stores at least one content object that is intended to be rendered for presentation at a predetermined time rate (Ben-Shaui, [0024], in which the customer may select the deliver speed corresponds

- to the time rate).
12. Regarding claim 11, Ben-Shaui further discloses a metadata enabled edge server as in claim 1, wherein said at least one content object comprises a video content object having image element frames and audio elements that are intended to be rendered for presentation on a playback device at said predetermined time rate so as to provide substantially the same visual and audio rendering to a viewer when generated (Ben-Shaui, [0019], 11-22, in which the parameter of dynamic, streaming media corresponds to the time rate for visual and audio).
  13. Regarding claim 12, Ben-Shaui further discloses a metadata enabled edge server as in claim 11, wherein the amount of data comprising said video content object is greater than the amount of data that is communicated in a packet over a packet switched Internet network (Ben-Shaui, [0049], amount of video content is greater than the data in a packet is well know in this skill of art)
  14. Regarding claim 13, Ben-Shaui further discloses a metadata enabled edge server as in claim 11, wherein the amount of data comprising said video content object is an amount of video content that when rendered in real-time at an intended playback rate would exceed a fraction of time of broadcast quality video (Ben-Shaui, [0066]).
  15. Regarding claim 15, Ben-Shaui further discloses a metadata enabled edge server as in claim 11, wherein said video content object comprises substantially a full-length feature film in a video format (Ben-Shaui, [0266]).

16. Regarding claim 16, Ben-Shaui further partially discloses a metadata enabled edge server as in claim 1, wherein said network communication link comprises Internet infrastructure (Ben-Shaui, [0005], [0031], [0049]).
17. Regarding claim 17, Ben-Shaui further partially discloses a metadata enabled edge server as in claim 1, wherein said network communication link comprises Internet infrastructure and Internet communication protocols (Ben-Shaui, [0049], in which MPLS corresponds to the Internet protocols).
18. Regarding claim 18, Ben-Shaui further partially discloses a metadata enabled edge server as in claim 1, wherein said metadata is used to enables intelligent decisions to be made on system operation and content routing (Ben-Shaui, [0120]).
19. Regarding claim 19, Ben-Shaui further partially discloses a metadata enabled Edge server as in claim 1, wherein said metadata contains information about the Actual content including its physical properties, possible locations of the content represented by the metadata, its usage terms (Ben-Shaui, [0049], [0083]).
20. Regarding claim 20, Ben-Shaui further partially discloses a metadata enabled edge server as in claim 1, wherein said metadata includes a globally unique identifier describing the content object and at least one location at which said content object may be found (Ben-Shaui, [0040], in which URL corresponds to the globally unique identifier).
21. Regarding claim 21, Ben-Shaui further partially discloses a metadata enabled



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Edge server as in claim 1, wherein said content object comprises a video content object having an amount of data requiring a plurality of packets for communication over a packet switched network, and said controller providing isochronous delivery from said identified content location to a playback device of said requesting user (Ben-Shaui, [0049]).

22. Regarding system claim 22 has limitations corresponding to server claim 1. Therefore, Claim 22 is rejected for the same reasons set forth in the rejection of claim 1.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kelvin Lin whose telephone number is 571-272-3898. The examiner can normally be reached on Flexible 4/9/5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

10/24/06  
KYL



EW CALDWELL  
PATENT EXAMINER

<b>Notice of References Cited</b>	Application/Control No. 10/090,709		Applicant(s)/Patent Under Reexamination MENON ET AL.	
	Examiner Kelvin Lin		Art Unit 2142	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-7,107,606	09-2006	Lee, Jack Yiu-bun	725/87
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
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	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
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	P					
	Q					
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	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
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	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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